

In the claims:

- 1 1. (Previously Amended) A computer system comprising:
2 a processor including:
3 a central processing unit (CPU) core to execute non-graphic instructions;
4 a graphics core to compute graphical transformations via supersampling
5 techniques; and
6 a unified graphics cache coupled to the graphics core, wherein the unified
7 graphics cache stores texture data, color data and depth data.
- 1 2. (Unchanged) The computer system of claim 1 wherein the graphics cache
2 comprises:
3 a texture cache to store texture data; and
4 a color and depth buffer to store the color data and the depth data.
- 1 3. (Previously Amended) The computer system of claim 1 further comprising:
2 a CPU cache coupled to the CPU core.
- 1 4. (Unchanged) The computer system of claim 3 further comprising a bus interface
2 coupled to the CPU cache and the graphics cache.
- 1 5. (Previously Amended) The computer system of claim 1 wherein the
2 graphics core performs rendering according to a tile-based rendering architecture.
- 1 6. (Previously Amended) The computer system of claim 1 further comprising:
2 a bus interface coupled to CPU cache and the graphics cache; and
3 a main memory coupled to the bus interface.

1 7. (Unchanged) The computer system of claim 2 wherein the graphics core
2 amplifies image polygons and renders the polygons into the graphics cache.

1 8. (Previously Amended) The computer system of claim 7 wherein
2 amplification of the image polygons are implemented via viewport transformation.

1 9. (Unchanged) The computer system of claim 7 wherein the graphics core
2 downsamples the image polygons after the polygons have been rendered.

1 10. (Unchanged) The computer system of claim 9 wherein the downsampling of the
2 image polygons are implemented by executing a bit aligned block transfer.

1 11. (Previously Amended) A method for supersampling an image comprising:
2 receiving polygons of a first tile of the image at a graphics core; and
3 amplifying the polygons at the graphics core;
4 rendering the polygons of the first tile into a unified graphics cache, wherein the
5 unified graphics cache stores texture data, color data and depth data of the image.

1 12. (Previously Amended) The method of claim 11 further comprising
2 executing a stretch aligned block transfer at the graphics core after rendering the
3 polygons.

1 13. (Previously Amended) The method of claim 11 wherein the polygons are
2 amplified four times the original size of the image.

1 14. (Previously Amended) The method of claim 11 wherein the amplification
2 is achieved using viewport transformation.

- 1 15. (Unchanged) The method of claim 11 wherein the process of rendering the
2 polygons comprises:
setting up the image polygons; and
rasterizing pixels within the image polygons.
- 1 16. (Unchanged) The method of claim 15 further comprising texturing the pixels
2 within the image polygons.
- 1 17. (Unchanged) The method of claim 11 further comprising downsampling the
2 polygons after the polygons have been rendered.
- 1 18. (Unchanged) The method of claim 17 wherein the downsampling is achieved by
2 executing a bit aligned block transfer.
- 1 19. (Unchanged) The method of claim 11 further comprising:
2 determining whether the unified graphics cache includes more tiles that are to be
3 rendered; and
4 if so, receiving polygons of a second tile of the image at the graphics core; and
5 rendering the polygons of the second tile into the unified graphics cache.
- 1 20. (Previously Amended) A central processing unit (CPU) comprising:
2 a CPU core to execute non-graphic instructions;
3 CPU cache coupled to the CPU core;
4 a graphics accelerator to compute graphical transformations via supersampling
5 techniques; and

6 a unified graphics cache coupled to the graphics core and the CPU, to store
7 texture data, color data and depth data.

1 21. (Unchanged) The CPU of claim 20 wherein the graphics cache comprises:
2 a texture cache to store texture data; and
3 a color and depth buffer to store the color data and the depth data.

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2 22. (Previously Amended) The CPU of claim 20 wherein the graphics core
3 amplifies image polygons and renders the polygons into the graphics cache.

1 23. (Unchanged) The CPU of claim 22 further comprising a bus interface coupled to
2 the CPU cache and the graphics cache.

1 24. (Previously Amended) The CPU of claim 23 wherein the graphics
2 accelerator performs rendering according to a tile-based rendering architecture.